IN THE CLAIMS

1 (Currently Amended). A method comprising:

enabling a phase change memory to be both optically and electrically ~~accessed~~ programmed.

2 (Original). The method of claim 1 including forming a phase change memory with a pair of parallel spaced electrodes and a phase change material between said electrodes.

3 (Original). The method of claim 2 including arranging said phase change material and said electrodes laterally.

4 (Original). The method of claim 3 including enabling light exposure of said phase change material.

5 (Original). The method of claim 4 including enabling light exposure through a thermally insulating material.

6 (Original). The method of claim 3 including enabling said phase change material to be electrically accessed through rows and columns.

7 (Original). The method of claim 6 including locating said rows and columns to enable light access to said cells.

8 (Original). The method of claim 7 including positioning one of said rows and columns below said phase change material.

9 (Original). The method of claim 8 including providing a via coupling one of said electrodes to said underlying row or column.

10 (Currently Amended). The method of claim 1 including using [[a]] the phase change memory to convert an optical signal to an electrical signal.

Claim 11 (Canceled).

12 (Currently Amended). A memory comprising:

a ~~light-accessible~~ light-accessible phase change material; and

a circuit to electrically ~~access~~ program said phase change material.

13 (Original). The memory of claim 12 wherein said phase change material is a chalcogenide.

14 (Currently Amended). The memory of claim 12 wherein said phase change material is arranged laterally and includes a pair of ~~laterally~~ parallel spaced electrodes ~~approximate~~ proximate to each of two opposed ends of said material.

15 (Original). The memory of claim 14 including rows and columns, said rows and columns arranged to avoid blocking light access to said phase change material.

16 (Original). The memory of claim 15 wherein one of said rows and columns is arranged beneath said phase change material.

17 (Original). The memory of claim 16 including a via which extends from one of said electrodes to said underlying row or column.

18 (Original). The memory of claim 12 including a substantially light transmissive thermally insulating material over said phase change material.

19 (Original). The memory of claim 18 wherein said substantially light transmissive, thermally insulating material is oxide.

20 (Original). The memory of claim 12 including a micro-mirror to optically access said phase change memory material.

21 (Currently Amended). The memory of claim 12 [[11]] including a plurality of cells each including phase change material, and an optical system to individually expose one memory cell of the plurality of memory cells to a laser light.

22 (Original). The memory of claim 12 wherein said circuit includes an addressing circuit.

23 (Currently Amended). A system comprising:

a processor-based device;

a wireless interface coupled to said processor-based device; and

a semiconductor memory coupled to said device, said memory including a ~~light accessible~~ light-accessible phase change material and a circuit to electrically ~~access~~ program said phase change material.

24 (Original). The system of claim 23 wherein said phase change material is a chalcogenide.

25 (Original). The system of claim 23 including a pair of spaced electrodes, said phase change material positioned between said spaced electrodes.

26 (Original). The system of claim 25 including a substrate, said phase change material positioned over said substrate such that the length of said phase change material is generally parallel to said substrate.

27 (Original). The system of claim 26 including a first set of conductors and a second set of conductors, said second set of conductors being generally transverse to said first set of conductors.

28 (Currently Amended). The system of claim 27 wherein said first and second sets ~~set~~ of conductors arranged to avoid blocking light access to said phase change material.

29 (Original). The system of claim 28 wherein one of said sets of conductors is arranged beneath said phase change material.

30 (Original). The system of claim 29 wherein a via extends from one of said electrodes to an underlying conductor.

31 (Currently Amended). The system of claim 23 including a substantially ~~light transmissive~~ light-transmissive material over said phase change material.

32 (Currently Amended). A method comprising:

optically programming ~~accessing~~ a phase change memory material; and

electrically programming ~~accessing~~ the phase change memory material.

33 (Original). The method of claim 32 including forming a phase change memory with a pair of parallel spaced electrodes and a phase change material between said electrodes.

34 (Original). The method of claim 33 including arranging said phase change material and said electrodes laterally.

35 (Original). The method of claim 34 including enabling light exposure of said phase change material.

36 (Original). The method of claim 35 including enabling light exposure through a thermally insulating material.